

# CS 445

## The Relational Model

Chapter 3

Sep 6, 2007

# Relational Model

- Read Chapter 3
- The database is a collection of *relations*
  - each relation is a table
- Data Definition Language
  - subset of SQL
- Integrity constraints
- Views

# Relation

- Relation schema
  - example:
- Relation instance
  - set of {tuples|records|rows}
- Relational database
  - Relational database schema
  - Relational database instance

# Translation

- Translate E-R diagram to Relational Model
  - E-R Diagram to SQL!
  - must represent:

# Create a relation

- SQL

- CREATE TABLE

(

CONSTRAINT  
)Type=INNODB;

PRIMARY KEY ( )

- INSERT INTO

( )

VALUES

( );

# Unique

- CREATE TABLE (

CONSTRAINT UNIQUE ( )

);

# Key References

- CREATE TABLE

(

CONSTRAINT

PRIMARY KEY

(

CONSTRAINT

FOREIGN KEY (

)

REFERENCES

Type=INNODB;

),

)